

Remarks

Claims 26-30 are canceled without prejudice above.

New claims 31-38 are added. All claims are supported by the specification, particularly at page 6, line 21 through page 8, line 6 and at page 12 .

Drawings

A Replacement Sheet for Fig. 4 accompanies this paper, and incorporates the reference sign “74” noted as missing in the action. Entry of this drawing amendment is respectfully requested, along with withdrawal of the drawing objection.

A Replacement Sheet for Fig. 9 accompanies this paper, changing reference sign “170” to reference sign “171” and a corresponding amendment is made above to the paragraph at page 10, lines 14-24 of the specification. Accordingly, withdrawal of the drawing objection is requested.

Specification

The objection to the specification under 37 CFR 1.71 is respectfully traversed.

The action states it is unclear how the mask element’s windows and light block portions move relative to the light source and photo detector to create the photo detector output. Applicants refer to the examination to the specification at page 6, line 21 through page 8, line 6. This portion of the specification clearly describes that in the illustrated embodiment an opto-switch 134 includes an aligned light source 138 and photo-detector 140 pair located on opposite sides of the arcuate mask element 132. The opto-switch 134 is stationary and the mask element is connected to the linkage 72 to pivot back and forth with the linkage 72. In this manner, the windows 136 of the mask element 132 are moved relative to the light source 138 and photo-detector 140. It is noted that the broadest claims of the application are not limited to the illustrated embodiment.

The action further states that it is unclear how the output of the photo-detector is formed. Applicants respectfully submit that it is known-that a photo-detector outputs a signal that having a characteristic related to the amount of light received by the photo-detector. In one example, the photo-detector may output voltage pulses as depicted in Fig. 7, with high

voltage 141 reflecting when a window 136 aligns with the light source 138 and photo-detector 140, and with low voltage 143 reflecting when light blocking portion 137 blocks light from passing from the light source 138 to the photo-detector. This example is also described in the above-noted portion of the specification. It is noted that the broadest claims of the application are not limited to the illustrated embodiment.

Based upon the foregoing, it is apparent that no amendment to the specification is needed, and withdrawal of the objection is respectfully requested.

Claim Rejections - 35 USC 112

The rejection of claims 1-25 is respectfully traversed. As noted above, the specification clearly describes that in the illustrated embodiment the “opto-switch 134 is connected to a PC board 150 that provides the necessary electrical connections for the light source 138 and photo-detector 140” and the “PC board is in turn fixedly connected to the slicer housing flange via a screw 152 or other suitable means” (see page 7, lines 6-9). The specification also clearly describes that in the illustrated embodiment “the mask element 132 is connected for pivoting movement with the linkage 72 via a bent, flange portion 154 of the mask element 132 through which a screw 156 passes and is received in a correspondingly threaded hole 158 in the linkage 72” (see page 7, lines 13-16). Thus, in the illustrated embodiment only the mask element is fixed to the link and is in fact moved through the space between the photo-detector and light element. It is noted that the broadest claims of the application are not limited to the illustrated embodiment.

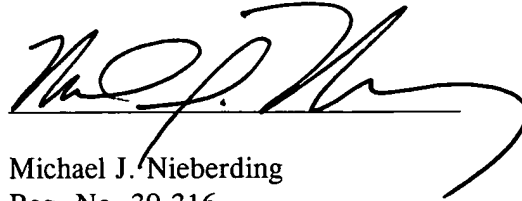
Applicants note that the use of the language “encoder arrangement associated with the pivot link” as set forth in claim 1 does not require that the entire encoder arrangement be connected to move with the pivot link.

Claim 18 expressly states that “the mask element operatively coupled for pivoting movement with the pivot link” but does not state that the light source and photo-detector are similarly coupled.

For the above reasons, applicants request withdrawal of the 112 rejections of claims 1-25.

The examiner is urged to contact the undersigned to discuss these 112 issues if the examiner intends to maintain the rejection.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael J. Nieberding", written over a horizontal line.

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